

## ABSTRACT

A peer-to-peer platform that may provide mechanisms through which peers may discover each other, communicate with each other, and cooperate with each other to form peer groups is described. The peer-to-peer platform may comprise several layers including a peer-to-peer platform layer, a peer-to-peer services layer, and a peer-to-peer applications layer. At the highest abstraction level, the peer-to-peer platform may be viewed as a set of protocols. Each protocol may be defined by one or more messages exchanged among participants of the protocol. In one embodiment, the peer-to-peer platform may include, but is not limited to, one or more of a peer discovery protocol, a peer resolver protocol, a peer information protocol, a peer membership protocol, a pipe binding protocol, and an endpoint routing protocol. To underpin this set of protocols, the peer-to-peer platform may define a number of concepts including peer, peer group, advertisement, message, pipe, and endpoint.